

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1, 5-9, 13-15, 17, 18, 22, 23, 27, 32, 33 and 37 are amended herein. New claims 38-48 are added. By the present Amendment, claims 1-48 are pending in the application. Re-examination and reconsideration of the application, as amended, are requested.

Applicant notes with appreciation, the Examiner's acknowledgment that the claim for priority under 35 U.S.C. 119 has been made and certified copies of priority applications have been received.

The inventor's declaration previously submitted for the present application has been objected to. The reason for the objection was stated as: "It does not include the notary's signature, or the notary's signature is in the wrong place." This objection is respectfully traversed, in that the U.S. patent laws and the rules of the U.S. Patent and Trademark Office do not require a notary signature on an inventor's declaration. Indeed, the sample declaration forms appearing in the MPEP (MPEP 602) and on the USPTO website do not include a location for a notary signature. Accordingly, it is requested that the objection to the declaration be withdrawn. Alternatively, the Examiner is invited to cite any specific rule that requires a notary signature on the inventor's declaration.

Claims 1-6, 8-12 and 14-16 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,111,182 to Takahashi. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of the Computer Software Sonic Foundry ACID Pro-4.0. Claims 17-37 were rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of U.S. Patent No. 5,326,930 to Hayakawa. These rejections are respectfully traversed in view of the claims as amended herein and the following remarks.

In particular, it is respectfully submitted that the claims, as amended herein, recite features that are neither described nor suggested by the cited references. For example, claim 1 as amended herein recites an electronic musical instrument that includes a selectable tempo setting means for selectively changing and setting a tempo of successive time instances for a sequence of stored musical tones. Such successive time instances may represent successive instances in time in the

playing of a musical composition of stored tones, including, but not limited to, successive beat or bar points in the musical composition.

According to amended claim 1, each time instance is associated with a “time instance number” (for example, but not limited to, a beat number or a bar number). Also according to amended claim 1, time information storage means is provided for storing time information that defines a plurality of succeeding times after a starting time, where each of the times after the starting time is associated with one of the time instance numbers for the sequence of musical tones stored in the musical tone storage means. With respect to Fig. 8, the original application describes an example of the storage of time information in the form of a plurality of times after a starting time (which may be the absolute time at which power is applied) with associated time instance numbers (which may be beat numbers 1, 2 ... MB). Claim 1 further includes readout start means for readout of the musical tones stored in the musical tone storage means based on the time information stored in the time information storage means.

None of the prior art of record discloses or suggests an instrument having such features, including time information storage means for storing time information that defines a plurality of succeeding times after a starting time, where each of the times after the starting time is associated with one of the time instance numbers for the sequence of musical tones stored in the musical tone storage means. The Takahashi patent describes a musical tone generation timing information memory 16 that stores read-out start and stop times for musical tone waveform data. However, Takahashi neither discloses nor suggests storing time information that defines a plurality of succeeding times after a starting time, where each of the times after the starting time is associated with one of the time instance numbers for the sequence of musical tones stored in the musical tone storage means, where each time instance number is a number for one of a plurality of time instances (such as, but not limited to beat or bar points in the sequence of tones) that is defined by the tempo set by the tempo setting means.

Neither the “Computer Software Sonic Foundry ACID Pro-4.0” nor the Hayakawa references disclose or suggest the distinctions over the Takahashi reference noted above. Furthermore, neither of those references were cited by the Examiner for such distinctions. In particular, the Sonic Foundry reference was cited by the Examiner as teaching of the use of a

waveform display and the capability of displaying both the waveform input data and waveform timing information as set tempo bars. The Hayakawa reference was cited by the Examiner as teaching a tempo controller for recording tempo and a keyboard as an input device.

Accordingly, Takahashi, either individually or in combination with one or more of the “Computer Software Sonic Foundry ACID Pro-4.0” and the Hayakawa patent references, neither discloses nor suggests the invention recited in claim 1, as amended herein. Accordingly, the rejection of claim 1 is respectfully traversed.

As claims 2-4 and 12-16 are each dependent, directly or indirectly, on claim 1, those claims are believed to be patentably distinguished over the cited references at least for reasons as discussed above with respect to claim 1. Accordingly, the rejection of claims 2-4 and 12-16 is also respectfully traversed.

Claim 5, as amended, is also distinguished from the references of record. As amended, claim 5 recites an electronic musical instrument that includes selectable tempo setting means for selectively changing and setting a tempo of timing for a sequence of stored musical tones. Such successive time instances may represent successive instances in time in the playing of a musical composition of stored tones, including, but not limited to, successive beat or bar points in the musical composition.

According to amended claim 5, each time instance is associated with a “time instance number” (for example, but not limited to, a beat number or a bar number). Also according to amended claim 5, address information storage means is provided for storing address information that defines a plurality of addresses corresponding to storage locations of the musical tones in the musical tone storage means, where each of the addresses is associated with one of the time instance numbers of the tempo set by the tempo setting means. With respect to Fig. 4, the original application describes an example of the storage of addresses with associated time instance numbers (which may be beat numbers 1, 2 ... MB). Claim 5 further includes readout start means for readout of the musical tones stored in the musical tone storage means based on the address stored in the time information storage means at a tempo set by the selectable tempo setting means.

None of the prior art of record discloses or suggests an instrument having such features, including address information storage means is provided for storing address information that defines a plurality of addresses corresponding to storage locations of the musical tones in the musical tone storage means, where each of the addresses is associated with one of the time instance numbers of the tempo set by the tempo setting means. The Takahashi patent describes a musical tone generation timing information memory 16 that stores read-out start and stop times for musical tone waveform data. However, Takahashi neither discloses nor suggests storing address information defining a plurality of addresses, where each address is associated with one of time instance numbers of a tempo set by tempo setting means.

Neither the “Computer Software Sonic Foundry ACID Pro-4.0” nor the Hayakawa references disclose or suggest the distinctions over the Takahashi reference noted above. Furthermore, neither of those references were cited by the Examiner for such distinctions. In particular, the Sonic Foundry reference was cited by the Examiner as teaching of the use of a waveform display and the capability of displaying both the waveform input data and waveform timing information as set tempo bars. The Hayakawa reference was cited by the Examiner as teaching a tempo controller for recording tempo and a keyboard as an input device.

Accordingly, Takahashi, either individually or in combination with one or more of the “Computer Software Sonic Foundry ACID Pro-4.0” and the Hayakawa patent references, neither discloses nor suggests the invention recited in claim 5, as amended herein. Accordingly, the rejection of claim 5 is respectfully traversed.

As claims 6-11 are each dependent, directly or indirectly, on claim 5, those claims are believed to be patentably distinguished over the cited references at least for reasons as discussed above with respect to claim 1. Accordingly, the rejection of claims 6-11 is also respectfully traversed.

Claim 17, as amended, is also distinguished from the references of record. As amended, claim 17 recites an electronic musical instrument that includes a tempo controller for recording tempo defining a plurality of successive time instances, wherein each time instance is associated with a time instance number. Such successive time instances may represent successive instances in time in the playing of a musical composition of stored tones, including, but not limited to, successive beat or bar points in the musical composition.

According to amended claim 17, a storage device is provided for storing the sequence of musical note data and for storing time information that defines a plurality of succeeding times after a starting time, wherein each of said times after the starting time is associated with a time instance number for timing musical note data stored in the storage device. As discussed above with respect to claim 1, the Takahashi patent describes a musical tone generation timing information memory 16 that stores read-out start and stop times for musical tone waveform data. However, Takahashi neither discloses nor suggests storing time information that defines a plurality of succeeding times after a starting time, where each of the times after the starting time is associated with one of the time instance numbers for the sequence of stored musical tones, where each time instance number is a number for one of a plurality of time instances (such as, but not limited to beat or bar points in the sequence of tones) that is defined by the tempo set by the tempo setting means.

Also as discussed above with respect to claim 1, neither the "Computer Software Sonic Foundry ACID Pro-4.0" nor the Hayakawa references disclose or suggest the distinctions over the Takahashi reference noted above. Furthermore, neither of those references were cited by the Examiner for such distinctions. In particular, the Sonic Foundry reference was cited by the Examiner as teaching of the use of a waveform display and the capability of displaying both the waveform input data and waveform timing information as set tempo bars. The Hayakawa reference was cited by the Examiner as teaching a tempo controller for recording tempo and a keyboard as an input device.

Accordingly, Takahashi, either individually or in combination with one or more of the "Computer Software Sonic Foundry ACID Pro-4.0" and the Hayakawa patent references, neither discloses nor suggests the invention recited in claim 17, as amended herein. Accordingly, the rejection of claim 17 is respectfully traversed.

As claims 18-26 are each dependent, directly or indirectly, on claim 17, those claims are believed to be patentably distinguished over the cited references at least for reasons as discussed above with respect to claim 17. Accordingly, the rejection of claims 18-26 is also respectfully traversed.

Claim 27, as amended, is also distinguished from the references of record. As amended, claim 27 recites a method of processing of musical note data comprising selecting and recording a selectable tempo of successive time instances for a sequence of stored musical tones, each time instance having a time instance number. Such successive time instances may represent successive instances in time in the playing of a musical composition of stored tones, including, but not limited to, successive beat or bar points in the musical composition.

Claim 27 further recites “storing time information that defines a plurality of succeeding times after a starting time, wherein each of said times after the starting time is associated with a time instance number for the sequence of musical tone data stored in the storage device.” As discussed above with respect to claim 1, the Takahashi patent describes a musical tone generation timing information memory 16 that stores read-out start and stop times for musical tone waveform data. However, Takahashi neither discloses nor suggests storing time information that defines a plurality of succeeding times after a starting time, where each of the times after the starting time is associated with one of the time instance numbers for the sequence of stored musical tones, where each time instance number is a number for one of a plurality of time instances (such as, but not limited to beat or bar points in the sequence of tones) that is defined by the tempo set by the tempo setting means.

Also as discussed above with respect to claim 1, neither the “Computer Software Sonic Foundry ACID Pro-4.0” nor the Hayakawa references disclose or suggest the distinctions over the Takahashi reference noted above. Furthermore, neither of those references were cited by the Examiner for such distinctions. In particular, the Sonic Foundry reference was cited by the Examiner as teaching of the use of a waveform display and the capability of displaying both the waveform input data and waveform timing information as set tempo bars. The Hayakawa reference was cited by the Examiner as teaching a tempo controller for recording tempo and a keyboard as an input device.

Accordingly, Takahashi, either individually or in combination with one or more of the “Computer Software Sonic Foundry ACID Pro-4.0” and the Hayakawa patent references, neither discloses nor suggests the invention recited in claim 27, as amended herein. Accordingly, the rejection of claim 27 is respectfully traversed.

As claims 28-36 are each dependent, directly or indirectly, on claim 27, those claims are believed to be patentably distinguished over the cited references at least for reasons as discussed above with respect to claim 27. Accordingly, the rejection of claims 28-36 is also respectfully traversed.

Claim 37, as amended, is also distinguished from the references of record. As amended, claim 37 recites an electronic musical instrument that includes means for selecting and recording a selectable tempo of successive time instances for a sequence of stored musical tones, each time instance having a time instance number. Such successive time instances may represent successive instances in time in the playing of a musical composition of stored tones, including, but not limited to, successive beat or bar points in the musical composition.

Claim 37 further recites “means for storing time information that defines a plurality of succeeding times after a starting time, wherein each of said times after the starting time is associated with a time instance number for the sequence of musical tone data stored in the storage device.” As discussed above with respect to claim 1, the Takahashi patent describes a musical tone generation timing information memory 16 that stores read-out start and stop times for musical tone waveform data. However, Takahashi neither discloses nor suggests storing time information that defines a plurality of succeeding times after a starting time, where each of the times after the starting time is associated with one of the time instance numbers for the sequence of stored musical tones, where each time instance number is a number for one of a plurality of time instances (such as, but not limited to beat or bar points in the sequence of tones) that is defined by the tempo set by the tempo setting means.

Also as discussed above with respect to claim 1, neither the “Computer Software Sonic Foundry ACID Pro-4.0” nor the Hayakawa references disclose or suggest the distinctions over the Takahashi reference noted above. Furthermore, neither of those references were cited by the Examiner for such distinctions. In particular, the Sonic Foundry reference was cited by the Examiner as teaching of the use of a waveform display and the capability of displaying both the waveform input data and waveform timing information as set tempo bars. The Hayakawa reference was cited by the Examiner as teaching a tempo controller for recording tempo and a keyboard as an input device.

Accordingly, Takahashi, either individually or in combination with one or more of the "Computer Software Sonic Foundry ACID Pro-4.0" and the Hayakawa patent references, neither discloses nor suggests the invention recited in claim 37, as amended herein. Accordingly, the rejection of claim 37 is respectfully traversed.

New claims 38-48 are added to further protect the subject invention. It is respectfully submitted that new claims 38-48 are patentably distinguished over the references of record, at least for reasons as discussed above with respect to independent claims 1, 5, 17 and 27. In addition, each of new claims 38-48 is believed to be further distinguished from the references of record, with respect to the additional features recited in the new claims.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

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